Q2O - PROJECT DESCRIPTION

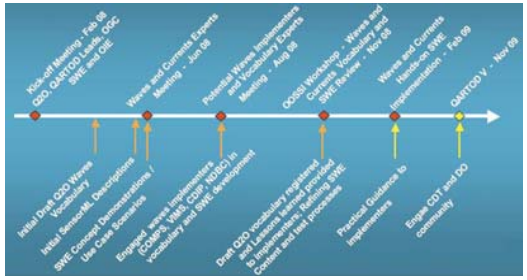
QARTOD --> OGC

- Implement the QARTOD recommendations for QA/QC into the OGC Sensor Web Enablement framework
- Documenting results by providing a tutorial and SensorML profiles
- Test the deliverables by implementing services at participating data-provider sites
- Bring together SWE and IT specialists with domain experts (waves, in situ currents, CTD, DO)
- Partner with community building projects such as OOSTethys and MMI

Compliment DIF?

Q2O approach is a start to addressing some DIF requirements for QC.

- Provide mechanism for ensuring data are of known and documented quality (QC005, QC015)
- Capture data quality information (qc tests, flags, flag definitions) (MTD004)
- Transport QC and error characteristics, flags, through data provider to consumer (QC020)



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Q2O - MILESTONES AND CHALLENGES

QARTOD --> OGC

Identify success stories, project accomplishments, benefits.

- MVCO Offerings (7)
  - Latest measurement and time series of all wave data parameters, including QC
  - Only wave data that passed QC
  - All pressure-derived wave data including QC and those that have passed QC
  - All wave data derived from the ADCP 2HZ velocity measurements, with and without QC
- QC Processing
  - Process Chains and generic test modules
  - Parameter value for tests
- Sensor descriptions
  - Includes QARTOD items (e.g. service history)
- Q2O Registered Vocabulary
- Understanding of OGC SWE potential
  - Joint workshops (2) with MMI and GCOOS Data Managers
  - Face-to-face meetings with QARTOD leads, domain experts, Q2O implementers, and OGC SWE experts

What have been the challenges (technical or strategic)?

- Apples and Oranges (communications)
  - Parameters = Properties
  - Criteria = Parameters
- Vocabulary development
  - Interpretation of QARTOD results
- All-in-one vs. Modular
  - Parameters (embedded vs input)
  - Sensor descriptions (Manufacturer and User instance)
- Flexibility of OGC SWE
  - Many options for approaching the task
- Scheduling
  - Priorities and coordination
- Year 2 and 3 cuts
  - Impacts hrs, mtgs, implementations

How were challenges resolved?

- Patience, Education, Multiple iterations

Q2O - GOING FOREWARD

QARTOD --> OGC

- Continue to developed qc test xml descriptions and resolvable URIs (URLS) with QC terms defined for in situ currents, CDT and DO
- Continue working with manufacturers to describe and reference terms that can be integrated into any framework using URIs.
- Extend work to engage CTD and DO community and sensor manufacturers to support QC test development and mappings disparate conventions.
- Demonstrations and “homework” for QARTOD V (November 2009)
- Planned integration of this capability into OOSTethys cookbooks
- Continued exposure of this Q2O effort through workshops and national and international forum presentations (IEEE-Bremen, OceanObs09 (with WHOI support) and Oceans09)
- Coordination with DIF team for QC requirements